No. 16-4298, 16-4300, 16-4304, 17-1283 (Consolidated with 16-4270)

IN THE UNITED STATES COURT OF APPEALS
FOR THE EIGHTH CIRCUIT

NO. 16-4270
STATE OF ARKANSAS, ET AL., Petitioners,
v.
U.S. EPA, and GINA MCCARTHY, Administrator, Respondents.

NO. 16-4298
ENTERGY ARKANSAS INC., ET AL., Petitioners,
v.
U.S. EPA, and GINA MCCARTHY, Administrator, Respondents.

NO. 16-4300
ARKANSAS ELECTRIC COOPERATIVE CORPORATION, Petitioner,
v.
U.S. EPA, and GINA MCCARTHY, Administrator, Respondents.

NO. 16-4304
ENERGY AND ENVIRONMENTAL ALLIANCE OF ARKANSAS, Petitioner,
v.
U.S. EPA, and GINA MCCARTHY, Administrator, Respondents.

17-1283
ENTERGY ARKANSAS INC., ET AL., Petitioners,
v.
U.S. EPA, and CATHERINE MCCABE, Acting Administrator, Respondents.

On Petition for Review of an Action of the
United States Environmental Protection Agency

OPENING BRIEF OF PETITIONERS ENTERGY ARKANSAS, INC., ENTERGY MISSISSIPPI, INC., ENTERGY POWER, LLC, ARKANSAS ELECTRIC COOPERATIVE CORPORATION, and ENERGY AND ENVIRONMENTAL ALLIANCE OF ARKANSAS

(counsel listed on next page)

William M. Bumpers
Debra J. Jezouit
Allison Watkins Mallick
Baker Botts L.L.P.
1299 Pennsylvania Ave., NW
Washington, DC 20004
Telephone: (202) 639-7700
william.bumpers@bakerbotts.com
debra.jezouit@bakerbotts.com
allison.mallick@bakerbotts.com

Timothy K. Webster
Joel F. Visser
Sidley Austin L.L.P.
1501 K Street, N.W.
Washington, D.C. 20005
Telephone: (202) 736-8000
twebster@sidley.com
jvisser@sidley.com

Kelly McQueen
Entergy Services, Inc.
425 W. Capitol Ave., 27th Floor
Little Rock, AR 72201
Telephone: (501) 377-5760
kmcquel@entergy.com

Counsel for Entergy Arkansas Inc., Entergy Mississippi Inc., and Entergy Power, LLC

Jennifer L. Loiacano
Arkansas Electric Cooperative Corporation
1 Cooperative Way
Little Rock, Arkansas 72209
Telephone: 501.570.2187
Jennifer.Loiacano@aecc.com

Counsel for Arkansas Electric Cooperative Corporation

Chad L. Wood
PPGMR LAW, PLLC
101 Morgan Keegan Dr., Suite A
Little Rock, Arkansas 72202
Telephone: (501) 603-9000
Chad@ppgmrlaw.com

Counsel for Energy and Environmental Alliance of Arkansas

SUMMARY OF THE CASE AND REQUEST FOR ORAL ARGUMENT

This consolidated appeal presents a challenge under the Clean Air Act ("CAA" or "the Act") to the U.S. Environmental Protection Agency's ("EPA" or "the Agency") final Federal Implementation Plan ("Final FIP") addressing regional haze and interstate visibility transport for Arkansas. The Regional Haze Program is concerned solely with visibility in federal Class I areas. Entergy Arkansas, Inc. ("EAI"), Entergy Mississippi, Inc. ("EMI"), Entergy Power, LLC ("EPI") (collectively, "Entergy"), Arkansas Electric Cooperative Corp oration ("AECC"), and Energy and Environmental Alliance of Arkansas ("EEAA") (collectively, "Petitioners") challenge the Final FIP's sulfur dioxide ("SO_2") and nitrogen oxides ("NOx") emissions limits for the White Bluff Electric Power Plant ("White Bluff") and the Independence Steam Electric Station ("Independence"). These limits do not comply with the CAA, are arbitrary and capricious, were improperly promulgated, and must be vacated. Petitioners also challenge EPA's failure to apply the requirements of the Cross -State Air Pollution Rule ("CSAPR") in lieu of best available retrofit technology ("BART") for eligible electric generating units ("EGUs").

Petitioners respectfully request 30 minutes for oral argument. Oral argument will assist fair considera tion of the complicated legal issues and a voluminous administrative record, and will enable the parties to fully address the Court's questions and concerns.

CORPORATE DISCLOSURE STATEMENT

Pursuant to Rule 26.1 of the Federal Rules of Appellate Procedur e and Local Rule 26.1A, Petitioners make the following disclosures.

EAI has its principal place of business in Little Rock, Arkansas. EAI generates, transmits, distributes, and sells electric power to approximately 712,000 electric customers in portions of Arkansas. Entergy Corporation owns all of the common stock of EAI. No other entity with publicly -traded securities owns any common stock of EAI.

EMI has its principal place of business in Jackson, Mississippi. EMI generates, transmits, distributes, and sells electric power to approximately 447,000 electric customers in portions of Mississippi. Entergy Corporation owns all of the common stock of EMI. No other entity with publicly -traded securities owns any common stock of EAI.

EPI is a Delaware l imited liability company with its principal business office located in The Woodlands, Texas. It is an electric utility company that sells electric energy at wholesale. All of the outstanding membership interests in Entergy Power, LLC are owned by Entergy Asset Management, Inc., a Delaware corporation. No other entity or person owns any equity interests in Entergy Power, LLC. All of the capital stock of Entergy Asset Management, Inc. is owned by Entergy Power Investment Holding, Inc., the common stock of which is owned entirely by Entergy

Amalgamated Competitive Holdings, LLC. Entergy Corporation owns all of the membership interests in Entergy Amalgamated Competitive Holdings, LLC.

Entergy Corporation is a publicly traded company (symbol: ETR) incorporated in the State of Delaware, with its principal place of business in the city of New Orleans, Louisiana. Entergy Corporation does not have any parent companies that have a 10 percent (10%) or greater ownership interest. Further, there is no publicly-held company that has a 10 percent (10%) or greater ownership interest in Entergy Corporation.

AECC is an Arkansas non-profit corporation that is organized and operated as an electric cooperative. AECC supplies wholesale electricity to its 17 electric distribution cooperative members, which in turn provide electricity to approximately 500,000 consumers. No parent corporation or publicly held company owns 10 percent (10%) or more of AECC.

EEAA is an association of Arkansas electric utilities and other energy companies which advocates for sound and predictable regulation of Arkansas' utility industry and whose members are owners and operators of facilities subject to the Final FIP. No parent corporation or publicly held company owns ten percent (10%) or more of EEAA.

TABLE OF CONTENTS

TABLE OF AUTHORITIES

CASES **Page(s)**

STATUTES

OTHER AUTHORITIES

GLOSSARY

ADEQ	Arkansas Department of Environmental Quality
AECC	Arkansas Electric Cooperative Corporation
AEP	American Electric Power
AFUDC	Allowance for funds used during construction
APA	Administrative Procedure Act
BART	Best Available Retrofit Technology
CAA or the Act	Clean Air Act
CENRAP	Central Regional Air Planning Association
CSAPR	Cross-State Air Pollution Rule
DSI	Dry sorbent injection
dv	Deciview
EAI	Entergy Arkansas, Inc.
EEAA	Energy and Environmental Alliance of Arkansas
EGU	electric generating unit
EMI	Entergy Mississippi, Inc.
Entergy	EAI, EMI and EPI, collectively
EPA or the Agency	U.S. Environmental Protection Agency
EPI	Entergy Power, LLC
FGD	Flue gas desulfurization technology

FIP	Federal Implementation Plan
JA	Joint Appendix
lb/mmBtu	Pounds per million British thermal units
LNB/SOFA	Low-NOx burners and separated overfire air
LTS	Long-term strategy
NOx	Nitrogen oxides
Q/D	Quantity of emissions over distance
RPG	Reasonable progress goal
SCR	Selective catalytic reduction
SIP	State Implementation Plan
SO_2	Sulfur dioxide
SWEPCO	Southwestern Electric Power Company
URP	Uniform rate of progress

JURISDICTIONAL STATEMENT

EPA published the Final FIP on September 27, 2016. 81 Fed. Reg. 66,332 (Sept. 27, 2016) (Addendum ("Add."), pp. 1 -91) (JA-___). The Petitioners filed with this Court petitions for review of the final rule on November 28, 2016, within the 60 -day period prescribed by Section 307(b)(1) of the CAA, 42 U.S.C. § 7607(b)(1), in Case Nos. 16-4298, 16-4300, and 16-4304. 42 U.S.C. § 7607(b)(1). Because the Final FIP applies only to Arkansas, this Court has jurisdiction as "the United States Court of Appeals for the appropriate circuit." *Id.*

The Petitioners filed administrative petitions for reconsideration and requests for stay of the Final FIP with EPA in November 2016. *See Administrative Petition for Reconsideration and Request for Stay of Entergy Arkansas Inc., et al.* (Nov. 23, 2016) ("Entergy Petition for Reconsideration") (JA-___); AECC, *Administrative Petition for Reconsideration and Request for Administrative Stay* (Nov. 23, 2016) ("AECC Petition for Reconsideration") (JA-___); EEAA, *Administrative Petition for Reconsideration and Request for Administrative Stays* (Nov. 28, 2016) ("EEAA Petition for Reconsideration") (JA-___). The filing of those administrative petitions did not affect the finality of the Final FIP for judicial review. 42 U.S.C. § 7607(b)(1). On or about February 1, 2017, EPA constructively denied those administrative petitions and, on February 7, 2017, Petitioners filed a joint petition for review of such constructive denial within the 60 -day period prescribed by the CAA. *Id. See* Case No. 17-1283. This was consolidated with Case No. 16-4270 on February 7, 2017.

The Petitioners or their members are co-owners and operators of the EGUs regulated by the Final FIP, including two coal-fired EGUs at White Bluff, two coal-fired EGUs at Independence, and four additional EGUs. The Final FIP establishes emissions limits for SO_2 and NOx at each coal-fired plant, which will require the installation of emission controls that cost over $2 billion. The Petitioners therefore have standing as a result of concrete and particularized injury that is fairly traceable to the Final FIP and that will be redressed by a decision that vacates the Final FIP in relevant part. *See, e.g., Lujan v. Defenders of Wildlife*, 504 U.S. 555, 561-62 (1992).

STATEMENT OF ISSUES

1. Whether the BART SO_2 emissions limits for White Bluff are in excess of EPA's authority, contrary to law, and arbitrary and capricious because (a) EPA did not account for factors that the CAA requires be taken into consideration and (b) the excessive costs of controls cannot be justified in light of the imperceptible visibility improvements they will achieve.

    - 42 U.S.C. § 7491(g)(2)
    - 40 C.F.R. §51.308(e)(1)(ii)(A)
    - *Dillmon v. NTSB*, 588 F.3d 1085, 1089-90 (D.C. Cir. 2009)
    - *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29 (1983)
    - *Am. Corn Growers Ass'n v. EPA*, 291 F.3d 1 (D.C. Cir. 2002)

2. Whether EPA's Reasonable Progress emission limits for Independence are in excess of EPA's authority, contrary to law, and arbitrary and capricious because (1) the emissions reductions are not "necessary" or justified to achieve Reasonable Progress; (2) the limits will not achieve emissions reductions during the first planning period, as required by law; and (3) EPA unlawfully abandoned the standardized approach used in other FIPs to identify sources for a Reasonable Progress analysis.

    - 42 U.S.C. §§ 7491(b)(2) and 7601(a)(2)
    - 40 C.F.R. §§ 51.308(d)(1) and 56.3(a)-(b);

- *FCC v. Fox Television Stations, Inc.*, 129 S. Ct. 1800 (2009)
- *Michigan v. EPA*, 135 S. Ct. 2699 (2015)
- *Texas v. EPA*, 829 F.3d 405 (5th Cir. 2016)

3. Whether the White Bluff and Independence NOx requirements are unlawful because they are not logical outgrowths of the proposed FIP and they are unachievable.

    - 40 C.F.R. § 51.301
    - *CSX Transp., Inc. v. Surface Transp. Bd.,* 584 F3d 1076 (D.C. Cir. 2009)
    - *Envtl. Integrity Project v. EPA*, 425 F.3d 992 (D.C. Cir. 2005)
    - *Nat'l Exch. Carrier Ass'n, Inc. v. FCC,* 253 F.3d 1 (D.C. Cir. 2001)
    - *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506 (D.C. Cir. 1983).

4. Whether EPA's decisi on to require BART sources to install NOx emissions controls is arbitrary and capricious and not in accordance with the law, because EPA's regulations authorize exemption of such sources from the requirement to install source-specific BART in states subject to CSAPR.

    - 40 C.F.R. § 51.308(e)

STATEMENT OF THE CASE

Section 169A of the CAA establishes a national goal of preventing future visibility impairment (*i.e.* "regional haze") and remedying existing visibility impairment caused by manmade air pollution in certain national parks, wilderness areas, and monuments (collectively defined as "Class I areas"). 42 U.S.C. § 7491(a)(1). To implement this goal, states must adopt State Implementation Plans ("SIPs") that include "emission limits, schedules of compliance and other measures *as may be necessary* to make Reasonable Progress toward meeting the national goal." 42 U.S.C. § 7491(b)(2) (emphasis added). SIPs must (1) require that certain major stationary sources meet emission limits based on BART, [1] and (2) include a long-term strategy ("LTS") for the state to make "reasonable progress" towards the national goal. 42 U.S.C. § 7491(b)(2). EPA promulgated the Regional Haze Rule in 1999 to implement section 169A. In recognition that the Regional Haze Program is intended to be implemented gradually, the Regional Haze Rule requires states to adopt SIPs that make Reasonable Progress in successive 10-year increments toward achieving natural visibility conditions in Class I areas by 2064. *See, e.g.*, 64 Fed. Reg. 35,714, 35,731 (July 1, 1999); 40 C.F.R. §§ 51.308(d), (f).

[1] BART is defined as "an emission limitation based on the degree of reduction available through the application of the best system of continuous emission reduction." 40 C.F.R. § 51.301.

Arkansas submitted its SIP to EPA in 2008 for the 2008-2018 "implementation period," with amendments submitted in 2010 and 2011. EPA partially disapproved Arkansas' SIP in 2012, 77 Fed. Reg. 14,604 (Mar. 12, 2012), triggering a two -year period for EPA to promulgate a FIP. 42 U.S.C. § 7410(c). Over three years later, EPA proposed a FIP for Arkansas. 80 Fed. Reg. 18,944 (Apr. 8, 2015) ("Proposed FIP") (JA-___). The Proposed FIP identified emission l imits for six sources subject to BART, including White Bluff. It also included emission limits for one additional source—Independence—ostensibly to achieve Reasonable Progress toward natural visibility conditions in Arkansas' two Class I areas: Caney Cree k Wilderness Area ("Caney Creek") and Upper Buffalo Wilderness Area ("Upper Buffalo"). Petitioners submitted timely comments on the Proposed FIP. *See* EAI Comments, Docket No. EPA-R06-OAR-2015-0189-0166 (JA-___); EMI Comments, Docket No. EPA -R06-OAR-2015-0189-0168 (JA -___); AECC Comments, Docket No. EPA -R06-OAR-2015-0189-0169 (JA -___); American Electric Power -Southwestern Electric Power Company ("AEP-SWEPCO") Comments, Docket No. EPA -R06-OAR-2015-0189-0164 (JA-___); EEAA Comments, Docket No. EPA -R06-OAR-2015-0189-0153 (JA-___). EPA issued the Final FIP on September 27, 2016. 81 Fed. Reg. 66,332 (Sept. 27, 2016) (Add. 1) (JA-___).

The Final FIP establishes emissions limits for both SO_2 and NOx at White Bluff and Independence. For White Bluff, EPA determi ned that BART requires SO_2 emissions limits based on the installation of dry flue gas desulfurization technology

("dry FGD") with compliance required five years after issuance of the Final FIP, *i.e.*, by October 27, 2021, and NOx emissions limits based on the installation of low-NOx burners and separated overfire air ("LNB/SOFA"), with a compliance deadline of 18 months from issuance of the Final FIP, *i.e.*, by April 27, 2018. *Id.* at 66,343-45 (Add. 13-15) (JA-___). For Independence, EPA determined that Reasonable Progress also requires emission limits based on dry FGD and LNB/SOFA, to be installed on the same timeframe as for White Bluff. *Id.* at 66,353-54 (Add. 23-24) (JA-___).

Petitioners challenge the Final FIP requirements for White Bluff and Independence as unlawful, arbitrary and capricious, and procedurally defective. The Final FIP unjustifiably imposes almost $2 billion in control costs on these plants for no perceptible visibility benefits. EPA unlawfully, arbitrarily, and capriciously failed to consider important economic and regulatory factors, failed to offer explanations for decisions that run counter to the evidence, and failed to provide a reasoned response to the comments. Additionally, EPA failed to provide notice and opportunity to comment on certain aspects of the Final FIP, and those aspects are not logical outgrowths of the Proposed FIP. Finally, Petitioners challenge the source-specific NOx emissions limits imposed on BART-eligible EGUs that also are subject to CSAPR.

LEGAL BACKGROUND

I. CLEAN AIR ACT VISIBILITY REQUIREMENTS

The Act requires states to reduce impairment of visibility in Class I areas resulting from manmade pollution. 42 U.S.C. § 7491. Congress tasked EPA with promulgating regulations to assure Reasonable Progress towa rd a long-term national goal of preventing future visibility impairment and remedying existing visibility impairment in these areas and to establish requirements for SIPs to address visibility impairment. *Id.* § 7491(a)(4). States must incorporate into their SIPs "emission limits, schedules of compliance, and other measures as may be necessary to make reasonable progress toward" the national goal. *Id.* § 7491(b)(1), (2). Where a state fails to submit an approvable SIP or where EPA disapproves a state's pl an, the CAA directs EPA to issue a FIP at any time within two years thereafter. *Id.* § 7410(c)(1). In doing so, EPA stands in the shoes of the state. *Central Arizona Water Cons. Dist. v. EPA* , 990 F.2d 1531, 1541 (9th Cir. 1993).

For certain major station ary sources built between 1962 and 1977 that "may reasonably be anticipated to cause or contribute to" visibility impairment in any Class I area, the Act requires the SIP to incorporate provisions for installation of BART to control emissions. 42 U.S.C. § 7491(b)(2)(A). In determining BART, the state must take into consideration five factors:

(i) the costs of compliance;

(ii) the energy and non-air quality environmental impacts of compliance;

(iii) any existing pollution control technology in use at the source;

(iv) the remaining useful life of the source; and

(v) the degree of visibility improvement that may reasonably be anticipated to result from the use of such technology.

Id. § 7491(g)(2).

SIPs also must include "a long-term (ten to fifteen years) strategy for making reasonable progress toward meeting the national goal." *Id.* § 7491(b)(2)(B).

EPA'S REGIONAL HAZE RULE

To carry out the requirements of the Act and establish the requirements for regional haze SIPs, EPA promulgated its "Regional Haze Rule" at 40 C.F.R. § 51.308.[2] A SIP must include three primary components: (1) the establishment of Reasonable Progress Goals ("RPGs") for each Class I area in the state to "provide for an improvement in visibility for the most impaired days over the period of the implementation plan and ensure no degradation in visibility for the least impaired days over the same period;" (2) an LTS for regional haze that "must include enforceable emissions limitations, compliance schedules, and other measures as necessary to achieve the reasonable progress goals . . ."; and (3) implementation of BART for certain major stationary sources. 40 C.F.R. §§ 51.308(d)(1), (d)(3) and (e).

[2] EPA first promulgated regional haze regulations in 1999, 64 Fed. Reg. 35,714 (July 1, 1999), and revised them in 2005, 70 Fed. Reg. 39,104 (July 6, 2005), and 2017, 82 Fed. Reg. 3,078 (Jan. 10, 2017). The 2017 revisions to the Regional Haze Rule are not applicable to this case, as they became effective after EPA issued the Final FIP.

As part of setting an RPG,[3] the state must determine the "rate of progress" for each Class I area that would be needed during each implementation period to attain natural visibility conditions by 2064 (commonly referred to as the "glidepath" or the "uniform rate of progress" or "URP"). Then, in establishing the RPG, the state must consider "the emission reduction measures needed to achieve [the URP] for the period covered by the implementation plan." 40 C.F.R. § 51.308(d)(1)(i)(B). In recognition that the Regional Haze Program is meant to be implemented gradually, EPA has explained that states "should take into account the fact that the long-term goal of no manmade impairment encompasses several planning periods. It is reasonable for [the state] to defer reductions to later planning periods in order to maintain a consistent glidepath toward the long-term goal." U.S. EPA, Guidance for Setting Reasonable Progress Goals Under the Regional Haze Program, at 1-4 (June 1, 2007) ("Reasonable Progress Guidance") Docket No. EPA-R06-OAR-2015-0189-0230 (JA-___).

In establishing an RPG, the state must take into consideration four factors: (1) the costs of compliance; (2) the time necessary for compliance; (3) the energy and non-air quality environmental impacts of compliance; and (4) the remaining useful life of any potentially affected sources. 42 U.S.C. § 7491(g)(1); 40 C.F.R.

[3] RPGs are expressed in "deciviews." 40 C.F.R. § 51.308(d)(1). According to EPA, "each deciview change is an equal incremental change in visibility perceived by the human eye. Most people can detect a change in visibility at one deciview." *See* 77 Fed. Reg. 30,248, 30,250 (May 22, 2012).

§ 51.308(d)(1)(i)(A). However, an RPG is just that —"a *goal* and not a mandatory standard which must be achieved by a particular date." 64 Fed. Reg. at 35,733 (emphasis in original).

SIPs also must include BART limitations for major stationary sources that meet specific statutory criteria. 42 U.S.C. § 7491(b)(2)(A). In establishing BART, the regulations require states to consider the technology available and the five statutory factors in CAA § 169A(g)(2) noted above, including the costs of compliance and the remaining useful life of the source. *Id.* § 7491(g)(2); *accord* 40 C.F.R. § 51.308(e)(ii)(A). EPA specifically recognizes that the remaining useful life of a source can affect the cost of compliance factor (*i.e.*, a shorter remaining useful life makes emissions controls more costly on an annualized basis). Accordingly, the Agency's guidelines on determining BART, which are binding for power plants larger than 750 MW such as White Bluff, require the states to factor remaining useful life into the cost of the control technology: "Where the remaining useful life is less than the [default] time period for amortizing costs, you should use this shorter time period in your cost calculations." 40 C.F.R. Pt. 51, App. Y, Section IV.D.4.k.1 (Add. 92).

For the first implementation period, EPA specifically recognized that installation of BART controls may be sufficient for a state's RPGs, without the need to require additional controls to achieve Reasonable Progress. Reasonable Progress Guidance at 4-1 (JA -___) ("Given the significant emissions reductions that we anticipate to result from BART" in combination with other CAA programs "it may be

all that is necessary to achie ve reasonable progress in the first planning period."). EPA also noted that, due to the refined technical analyses required by the Regional Haze Rule, including the analyses of emissions and air quality, "some States may conclude that control strategies s pecifically for protection of visibility are not needed at this time because the analyses may show that existing measures are sufficient to meet reasonable progress goals." 64 Fed. Reg. at 35,721.

The Regional Haze Rule also allows states to adopt a tra ding program in lieu of source-specific BART for the pollutants covered by the trading program if the trading program will result in greater visibility improvement. 40 C.F.R. § 51.308(e). In 2011, EPA adopted CSAPR, which establishes, *inter alia*, an emis sions trading program for ozone season NOx that applies to EGUs in certain states whose transported emissions affect air quality in other states. 76 Fed. Reg. 48,208 (Aug. 8, 2011). Arkansas is subject to CSAPR's ozone season NOx trading program. 40 C.F .R. § 52.184; § 97.510. In 2012, EPA promulgated a final rule finding that CSAPR provides for greater Reasonable Progress towards the national visibility goal than BART. 77 Fed. Reg. 33,642 (June 7, 2012). Accordingly, states subject to CSAPR can adopt CSAPR in lieu of source -specific BART for their EGUs for the pollutants for which the EGUs are subject to CSAPR. *See id.* at 33,647.

STATEMENT OF FACTS

I. ARKANSAS SIP SUBMITTAL

In September 2008, the Arkansas Department of Environmental Quality ("ADEQ") submitted a regional haze SIP to EPA for the first implementation period, with supplemental submittals in August 2010, and September 2011. 76 Fed. Reg. 64,186, 64,187 (Oct. 17, 2011); Arkansas SIP Submittal, Docket No. EPA -R06-OAR-2008-0727-0002 (Sept. 23, 2008) ("Arkansas SIP"). The Arkansas SIP imposed SO_2 and NOx BART limits on all six subject -to-BART sources in the state, including White Bluff. The state established RPGs for Caney Creek and Upper Buffalo for the first implementation period of 22.48 deciviews and 22.52 deciviews, respectively. Arkansas SIP at 65 Fig.10.5. Based on modeling conducted by the Central Regional Air Planning Association ("CENRAP"),[4] Arkansas concluded that controls other than BART were not needed to remain on the glidepath and demonstrate Reasonable Progress for the first implementation period. *Id.* at 74.

EPA disapproved portions of the Arkansas SIP in March 2012, including the SO_2 and NOx BART limits for White Bluff, finding that "the State did not satisfy all the regulatory and statutory requirements in making [its] BART determinations." 77 Fed. Reg. 14,604, 14,605 (Mar. 12, 2012). EPA also disapproved Arkansas' RPGs,

[4] CENRAP is a regional planning organization that includes Nebraska, Kansas, Oklahoma, Texas, Minnesota, Iowa, Missouri, Arkansas, and Louisiana. It is funded by EPA to address the interstate transport nature of the regional haze pollutants in the region.

finding that the State did not establish RPGs in accordance with the requirements of the Regional Haze Rule. *Id.* at 14,630.

II. PROPOSED FIP

In April 2015, more than three years after the SIP disapproval, EPA proposed a replacement FIP. 80 Fed. Reg. 18,944 (Apr. 8, 2015) (JA-___). EPA proposed to establish SO_2 BART limits of 0.06 lb/mmBtu (pounds per million British thermal units) on a rolling 30 -boiler operating day basis for each White Bluff EGU (Units 1 and 2), based on dry FGD, with a compliance deadline of five years from the effective date of the Final FIP. *Id.* at 18,972-73 (JA-___). For NOx, EPA proposed rolling 30-boiler operating day average emission rates of 0.15 lb/mmBtu for each White Bluff EGU based on LNB/SOFA, with a compliance deadline of three years from the effective date of the final FIP. *Id.* at 18,974-75 (JA-___).

For Reasonable Progress, EPA stated it was appropriate to focus solely "on the Entergy Independence Power Plant because it is a significant source of SO_2 and NOx, as it is the second largest point source for both NOx and SO_2 point source emissions in the State," and the largest and third largest point sources already would be regulated under the BART requirements. *Id.* at 18,991-92 (JA-___). EPA concluded that the same SO_2 and NOx controls and emissions limits proposed for White Bluff should apply to the two EGUs at Independence and on the same compliance timeframe. *Id.* at 18,992 -96 (JA -___). EPA did not evaluate controls for Reasonable Progress

purposes for any other sources in Ark ansas despite identifying the lack of such an analysis as a basis for its disapproval of Arkansas' RPGs. *See* 76 Fed. Reg. at 64,196.

III. COMMENTS ON THE PROPOSED FIP

Petitioners submitted extensive comments on the Proposed FIP. EAI explained in its commen ts that the proposed control requirements for White Bluff and Independence would impose approximately *$2 billion in costs* , all to obtain an imperceptible visibility improvement. EAI Comments at 2 (JA -___). Petitioners further explained that dry FGD shoul d not be considered cost-effective as BART for SO_2 at White Bluff in light of EPA's underestimation of costs coupled with EAI's proposal to permanently cease combusting coal at Units 1 and 2 by 2027 and 2028. EAI Comments at 5 -11 (Add. 94 -100) (JA-___); EEAA Comments at 6 -8 (JA-___); AECC Comments at 5-6 (JA-___).

Petitioners disputed EPA's basis for selecting Independence for evaluation of Reasonable Progress controls, explaining that it was contrary to the selection criteria EPA used in previous FIPs, and that EPA exceeded its statutory authority by proposing controls that were not "necessary to make reasonable progress." EAI Comments at 17 (citing 42 U.S.C. § 7491(b)(2)) (JA -___); EMI Comments at 4 -8 (JA-___); EEAA Comments at 8 -13 (JA-___). The comm ents further documented that, in 2015, actual visibility at Arkansas' two Class I areas was on track to meet EPA's proposed RPGs for 2018 and had improved significantly more than the URP, making controls on Independence *unnecessary* for Reasonable Progress purposes. EAI

Comments at 17 (JA-___); EMI Comments at 7-8 (JA-___); EEAA Comments at 12-13 (JA-___); AECC Comments at 3 (JA-___).

Petitioners also argued that EPA should adopt CSAPR instead of source-specific NOx BART controls for EGUs in the state. EAI Comments at 13 (JA-___); EEAA Comments at 4-5 (JA-___); AECC Comments at 6-7 (JA-___); AEP-SWEPCO Comments at 2-3 (JA-___).

IV. FINAL FIP

EPA issued the Final FIP in September 2016. 81 Fed. Reg. 66,332 (Sept. 27, 2016) (Add. 1) (JA-___). Despite EAI's proposal to permanently cease combusting coal at White Bluff, EPA determined that SO_2 BART for each unit should be a 30-boiler operating day rolling average emission limit of 0.06 lb/mmBtu, based on the installation of dry FGD. *Id.* at 66,335 (Add. 5) (JA-___). In evaluating the cost-effectiveness of dry FGD, EPA ignored EAI's proposal and applied a default remaining useful life of 30 years, *id.* at 66,360 (Add. 30) (JA-___), rather than the seven years resulting from EAI's proposal. EPA mischaracterized EAI's comments on the Proposed FIP, claiming that EAI's proposal did not include an enforceable commitment to cease coal-fired operation at White Bluff, and that it was predicated on EPA's acceptance of EAI's proposed emission limits for Independence, which EPA declined to do. *Id.* at 66,356-58 (Add. 26-28) (JA-___). For Independence, EPA finalized the SO_2 emission limits as proposed. *Compare* 81 Fed. Reg. at 66,339 Tbl.2 (Add. 9) (JA-___) *with* 80 Fed. Reg. at 18,994 (JA-___).

With respect to NOx for both White Bluff and Independence, EPA finalized limits based on the installation of LNB/SOFA. For operation at loads of 50-100 percent of maximum capacity, EPA finalized limits as proposed: 0.15 lb/mmBtu on a rolling 30-boiler operating day basis. 81 Fed. Reg. at 66,339 (Add. 9) (JA -___). However, EPA finalized a separate limit for operation at loads less than 50 percent of maximum capacity that was set at 671 lb NOx/hr to be met on a three-hour averaging period. *Id.* at 66,359 (Add. 29) (JA -___). EPA offered no justification for this new averaging period, nor any explanation of whether this new level would be appropriate. Further, EPA shortened the compliance period for meeting the NOx limits from three years to 18 months after the effective date of the Final FIP. *Id.* at 66,338 (Add. 8) (JA-___).

V. PETITIONS FOR RECONSIDERATION

Petitioners individually filed Administrative Petitions for Reconsideration and Requests for Stay of the Final FIP in November 2016. Each administrative petition argued that EPA must grant reconsideration because the Agency failed to provide adequate notice and opportunity to comment on significant requirements in the Final FIP that were not logical outgrowths of the Proposed FIP. Entergy Petition for Reconsideration at 2 (JA -___); AECC Petition for Reconsideration at 3 (JA -___); EEAA Petition for Reconsideration at 5 (JA -___). The administrative petitions also asserted that EPA should reconsider its findings in the Final FIP based on more recent visibility monitoring data, which became available after the close of the

comment period and demonstrated that visibility in Arkansas' Class I areas was already better than the RPGs and the URPs. Entergy Petition for Reconsideration at 4 (JA-___); AECC Petition for Reconsideration at 6 -7 (JA-___); EEAA Petition for Reconsideration at 3 -4 (JA -___). Furthermore, Entergy argued that EPA should reconsider the Final FIP because it contains clear errors, such as failing to evaluate the remaining useful life of White Bluff, Entergy Petition for Rec onsideration at 7 (JA -___), and the cost of SO_2 controls, *id.* at 5-6 (JA-___).

To avoid the significant, irreparable harms that already have begun to occur, Entergy requested that EPA take action on its Petition for Reconsideration by February 1, 2017. *Id.* at 1 (JA -___). EEAA's and AECC's Petitions for Reconsideration made the same request by reference to Entergy's petition. AECC Petition for Reconsideration at 1 (JA -___); EEAA Petition for Reconsideration at 3 (JA-___). EPA constructively denied all three Petitions for Reconsideration by failing to respond by February 1, 2017.

SUMMARY OF THE ARGUMENT

The Final FIP is replete with errors, resulting in final emissions limits for White Bluff and Independence that are unlawful, arbitrary and capricious, and must be vacated.

The SO_2 emissions limits for White Bluff are based on the installation of controls that were selected using a flawed BART analysis that unlawfully failed to

consider a mandatory statutory factor, the remaining useful life of the units, thereby artificially distorting the cost-effectiveness of those controls. EPA assumed a 30 -year life for the units instead of the six to seven years resulting from Entergy's commitment to cease burning coal. EPA's BART analysis further failed to properly consider the minimal visibility improvements the controls would produce. At a cost of almost $1 bil lion, amortized over just six to seven years, dry FGD cannot be justified in light of the undetectable visibility improvements it would achieve.

The final emissions limits for Independence are arbitrary and capricious, and based on an unlawful Reasonable Progress analysis. First, the controls are not "necessary" to achieve Reasonable Progress. Visibility in both Class I areas is better than EPA's own RPGs and is significantly below the glidepath. Furthermore, the nearly $1 billion in control costs would result in de minimis visibility benefits. Second, the SO_2 Reasonable Progress controls cannot be deemed necessary to achieve Reasonable Progress for *this* implementation period because they cannot be installed until the next implementation period. Third, EPA unlawfully deviated from the Reasonable Progress analysis it used in multiple prior FIPs.

The Final FIP also imposes on White Bluff and Independence unattainable NOx emissions limits that must be met only 18 months from the effective date of the Final FIP. In addition to being arbitrary, capricious and unattainable, these limits and timeline are not logical outgrowths the Proposed FIP.

Finally, EPA's decision to impose source -specific NOx emission limits on the BART-eligible EGUs in Arkansas is arbi trary and capricious in light of the Agency's own regulations, which authorize exemption of these units from source -specific BART for NOx because Arkansas is subject to the CSAPR ozone season NOx trading program. Accordingly, the NOx limits for such EGUs must be vacated.

ARGUMENT

I. STANDARD OF REVIEW

The Final FIP must be vacated if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law," or if it exceeds statutory authority. *North Dakota v. EPA* , 730 F.3d 750, 758 (8th Cir. 2013) (citing 42 U.S.C. § 7607(d)(9)); 5 U.S.C. § 706(2); *see also Missouri Limestone Producers Ass'n., Inc. v. Browner*, 165 F.3d 619, 621 (8th Cir. 1999).

Agency action is arbitrary and capricious if:

> the agency has relied on factors which Con gress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co. , 463 U.S. 29, 43 (1983). Accordingly, courts consider whether the agency's decision was "based on a consideration of the relevant factors and wh ether there has been a clear error in judgment." *Ringsred v. Dole* , 828 F.2d 1300, 1302 (8th Cir. 1987) (quoting *Citizens to*

Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 416 (1971)). An agency "must provide a satisfactory explanation for its actions based on relevant data." *Niobrara River Ranch, L.L.C. v. Huber* , 373 F.3d 881, 884 (8th Cir. 2004). This Court has described application of the standard of review as a "searching and careful" review of the administrative record to determine "whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment." *See Downer v. United States* , 97 F.3d 999, 1002 (8th Cir. 1996) (quoting *Marsh v. Oregon Natural Res. Council*, 490 U.S. 360, 378 (1989)).

II. EPA'S $1 BILLION SO_2 BART DETERMINATION FOR WHITE BLUFF IS UNLAWFUL, ARBITRARY, AND CAPRICIOUS.

The SO_2 emissions limits for White Bluff must be vacated because they are the product of a flawed BART analysis that unlawfully failed to consider a mandatory factor—the remaining useful life of the White Bluff units. EPA also failed to consider the imperceptible visibility improvements that dry FGD would achieve [5] in light of the nearly $1 billion it would cost.

A. EPA's SO_2 BART Analysis Arbitrarily and Capriciously Failed to Account for Remaining Useful Life.

EPA's SO_2 BART analysis for White Bluff Units 1 and 2 ignored the remaining useful life of those units —a factor the CAA *mandates* EPA take into account. This

[5] EPA's own analysis predicts controls on White Bluff would achieve imperceptible visibility improvements at Caney Creek and Upper Buffalo of only 0.813 dv and 0.762 dv, respectively. 81 Fed. Reg. at 66,343 Tbl.9 (Add. 13) (JA-___). According to EPA, one deciview reflects perceptible changes in visibility. *See* 77 Fed. Reg. at 30,250.

allowed EPA to improperly and artificially manipulate its cost-effectiveness analysis for the required controls, resulting in a flawed BART determination that must be vacated.

To qualify as BART, dry FGD must be cost-effective. 42 U.S.C. § 7491(g)(2); *accord* 40 C.F.R. §§ 51.308(e)(1)(ii)(A) & Pt. 51, App. Y, Section IV.D.4.k (Add. 92-93). But determining cost-effectiveness *requires* consideration of the remaining useful life of the units. *See id.* When remaining useful life is less than the standard period for amortizing the costs of controls (*e.g.*, 30 years), the shorter time period must be used in BART cost calculations. 40 C.F.R. Pt. 51, App. Y, Section IV.D.4.k (Add. 92-93). EPA acknowledges that BART controls, which may be cost-effective using the standard amortization period, may not be cost-effective when a source's remaining useful life is considered because the costs are amortized over a shorter amount of time. *See* 81 Fed. Reg. at 66,356 (Add. 26) (JA-___). Simply put, extremely expensive controls may not be worth installing on a plant that will operate for only a few more years.

In comments on the Proposed FIP, EAI explicitly proposed to cease combusting coal at White Bluff Units 1 and 2 in 2027 and 2028, limiting the amortization period for dry FGD to just six or seven years. [6] EAI Comments at 6 (Add. 95) (JA-___). EPA arbitrarily and capriciously disregarded this information

[6] The proposal did not state which unit would cease combusting coal first.

and, instead, assumed that the units would remain in service for 30 more years, dramatically reducing the annualized capital costs and artificially understating the cost of dry FGD per ton of SO_2 removed (the metric used by EPA). This made dry FGD appear to be cost-effective when it patently is not.

Had EPA used the six- to seven-year actual remaining useful life, as required by its regulations, and properly included all of the costs of dry FGD, the cost would have at least *tripled* from $2,421-$2,565 to $ 7,119-$8,004 per ton of SO_2 removed.[7] *Compare* 81 Fed. Reg. at 66,343 (JA-___) *with* Sargent & Lundy LLC, *Entergy Arkansas, Inc. - White Bluff Dry FGD Cost Estimate and Technical Basis*, Report No. SL-012831 (July 2015) (Ex. C to Entergy Petition for Reconsideration) ("Sargent & Lundy Report") (Add. 102-103) (JA-___). These costs vastly exceed the cost-effectiveness thresholds used by EPA in numerous other regional haze plans. *See* Proposed Arizona Regional Haze FIP, 79 Fed. Reg. 9,318, 9,331-33 (Feb. 18, 2014), *finalized in* 79 Fed. Reg. 52,420, 52,436 (Sept. 3, 2014) (EPA declining to impose dry FGD as BART where average cost-effectiveness was **$5,090/ton**); Proposed North Dakota Regional Haze FIP, 76 Fed. Reg. 58,570, 58,630 (Sept. 21, 2011), *finalized in* 77 Fed. Reg. 20,894, 20,896 (Apr. 6, 2012) (EPA approving state's determination that cost-effectiveness of **$6,525/ton** was excessive and did not constitute BART); Proposed Montana Regional

[7] EAI's comments on the Proposed FIP indicated that the costs would range from $7,689-$8,599 per ton of SO_2 removed, EAI Comments at 12 (Add. 101) (JA-___), but the more recent cost data from Sargent & Lundy indicate that the costs will range from approximately $7,119-8,004 per ton.

Haze FIP, 77 Fed. Reg. 23,988, 24,047 (Apr. 20, 2012) *finalized in* 77 Fed. Reg. 57,864, 57,866 (Sept. 18, 2012) (EPA determining that SO_2 controls were not cost-effective at **$5,442/ton** and **$6,365/ton**).

EPA's purported justifications for disregarding the remaining useful life of White Bluff Units 1 and 2 are meritless and unsupported by fact and law. *First*, EPA's assertion in the Final FIP that EAI did not offer to accept a binding limit on the remaining useful life of White Bluff Units 1 and 2 is patently incorrect. *See* 81 Fed. Reg. at 66,356 -57 (Add. 26 -27) (JA-___). EAI explicitly made such a commitment: "[EAI] proposes to cease burning coal at White Bluff Units 1 and 2 by 2027 and 2028, one unit per year, *and is prepared to take an enforceable commitment* to that effect." EAI Comments at 5 (emphasis added) (JA-___).

EPA's claim that EAI "does not propose ... adopting a binding requirement to burn only natural gas or completely shut down the units" is thus inexplicable. *See* 81 Fed. Reg. at 66,356 (Add. 26) (JA -___). An agreement to accept a binding requirement to cease burning coal *requires* EPA to assume that SO_2 emissions would be zero subsequent to the cessation of coal combustion. *Id.* at 66,356-57 (Add. 26-27) (JA-___). EPA's failure to consider EAI's proposal to accept such a binding requirement is thus arbitrary, capricious and unlawful.

Second, the record belies EPA's claim that EAI's proposal to cease using coal at White Bluff was dependent on EAI's separate proposal related to emission limits for Independence. *See id.* at 66,358 (Add. 28) (JA-___); EPA Response to Comments for

the State of Arkansas; Reg ional Haze and Interstate Visibility Transport Federal Implementation Plan, Docket No. EPA -R06-OAR-2015-0189-0187, at 57 (September 27, 2016) ("EPA Response to Comments") (JA -___). Nowhere did EAI assert that its commitment to cease burning coal at White Bluff was contingent on EPA's agreement to the emission limits that EAI proposed for Independence. EAI proposed an approach to address all four coal -fired units at White Bluff and Independence, and provided modeling of its proposal demonstrating that its approach would achieve virtually the same visibility benefits as EPA's Proposed FIP for significantly less cost. EAI Comments at 45 -46 (JA-___). But EAI never stated that its White Bluff proposal was contingent on its proposed emission limits for Independence. To the contrary, EAI explicitly stated that the interim emissions reductions it offered for Independence were a *complement* to its proposal for White Bluff. EAI Comments at 4 (JA -___) ("Entergy is prepared to offer meaningful interim emission reduc tions to complement its proposed commitment to cease coal - fired operations at White Bluff and assure that Arkansas remains on a path that is below the URP for the long term.").

Third, EPA's argument that Entergy's failure to provide information on dry sorbent injection ("DSI") as an interim SO_2 control somehow negated EPA's obligation to conduct a reasonable BART analysis, 81 Fed. Reg. at 66,356 (Add. 26) (JA-___), is a red herring. Whether DSI should be considered BART is irrelevant to whether dry FGD con stitutes BART in light of the White Bluff units' six - or seven-

year remaining useful life. If EPA believed that DSI might constitute an alternative BART for the short term prior to the cessation of coal burning, it should have deferred its BART determination to evaluate DSI. However, it could not identify the lack of such analysis as a basis for disregarding a statutory obligation to consider the units' limited remaining useful lives.

None of these justifications is a reasonable explanation for EPA's failure to consider the remaining useful life of White Bluff in light of Entergy's commitment. EPA has entirely failed to consider "an important aspect of the problem:" one of the five factors that the CAA *requires* it to consider. *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43. Further, EPA's proffered explanation for its decision runs counter to the available information before the Agency. *Id.* Accordingly, EPA's BART determination is arbitrary, capricious and unlawful and must be vacated.

At a minimum, EPA should have included EAI's proposal as an alternative compliance option in the Final FIP and permitted EAI to choose which option to pursue. EPA's regulations specifically authorize it to establish alternative emissions limits depending on whether or not a source ultimately decides to cease the operations that produce emissions. 40 C.F.R. Pt. 51, App. Y, Section IV.D.4.k.3 (Add. 93). Here, EPA should have allowed EAI the option of installing dry FGD at White Bluff by 2021 or permanently ceasing coal combustion in 2027 and 2028, with a less stringent emission limit in the interim.

EPA has done exactly this for similar proposals in other FIPs, such as PacifiCorp's proposal to shut down a unit in Wyoming as an alternative to installing selective catalytic reduction ("SCR") to control NOx emissions. *See* 79 Fed. Reg. 5,032, 5,045 (Jan. 30, 2014). There, EPA provided that the unit could either install SCR by 2019, or cease operation by 2027, while complying with a less stringent emissions limit in the interim. *Id.* EPA could have done the same thing here, and did so for a different unit in the Final FIP. *See* 81 Fed. Reg. at 66,346 (Add. 16) (JA -___) (alternative BART standards if Domtar Power Boiler No. 1 burns only natural gas). EPA offered no reasoned basis to deviate from this precedent and for refusing to establish alternative BART standards for White Bluf f. *See Dillmon v. NTSB*, 588 F.3d 1085, 1089-90 (D.C. Cir. 2009) ("Reasoned decision making ... necessarily requires the agency to acknowledge and provide an adequate explanation for its departure from established precedent.") (citing *FCC v. Fox Television Stations, Inc.*, 129 S. Ct. 1800, 1811 (2009)); *see also* 40 C.F.R. § 56.5(a) (requiring EPA regional offices to ensure that their actions are "as consistent as possible with the activities of other Regional Offices").

Because EPA ignored the remaining us eful lives of the White Bluff units, a factor it statutorily *must* consider, the SO_2 limits for White Bluff are not in accordance with law.

B. The Exorbitant Costs for Dry FGD Are Too High to Constitute BART in Light of the Resulting Minimal Visibility Benefits.

Dry FGD cannot constitute SO_2 BART for White Bluff because the costs of these controls —approximately *$1 billion* —are grossly disproportionate to their anticipated visibility improvements. *See* EAI Comments at 2 (JA -___). The controls are clearly not cos t-effective in light of the degree of visibility improvements they are reasonably anticipated to achieve. EPA compounded its error by improperly excluding approximately *$495 million* in control costs for dry FGD. Sargent & Lundy Report at 2 (Add. 102) (JA -___) (By excluding certain costs, EPA claimed that dry FGD costs would be approximately $495 million for the White Bluff while Sargent & Lundy more accurately estimated costs at approximately $991 million).

The CAA requires EPA to consider the degree of anticipated visibility improvement from the installation of controls in establishing BART. 42 U.S.C. § 7491(g)(2). EPA cannot mandate that a source "spend millions of dollars for new technology that will have no appreciable effect on the haze." *Am. Corn Growers Ass'n v. EPA*, 291 F.3d 1, 7 (D.C. Cir. 2002); *cf Michigan v. EPA,* 135 S.Ct 2699, 2707 (2015) (finding it irrational "to impose billions of dollars in economic costs" in a CAA rule to produce minimal benefits). Yet the Final FIP does exactly this.

EPA acknowledges that improvements predicted at Caney Creek and Upper Buffalo from controls on White Bluff Units 1 and 2 are only a fraction of one deciview, making them imperceptible to the human eye. 81 Fed. Reg. at 66,343 Tbl.9

(Add. 13) (JA-___) (visibility improvements ranging from 0.762 dv to 0.813 dv). But even these estimates greatly overstate the predicted visibility improvement from controls on White Bluff. EPA used unrealistic and distorting assumptions about background conditions that ign ore all other manmade sources of visibility impairment. Using rational, real -life impacts, the predicted improvements are far smaller. For example, EPA used these more comprehensive background conditions when it projected that the cumulative benefit of i nstalling *all* the controls in the Proposed FIP (*i.e.*, all BART controls plus controls at Independence) would result in visibility "benefits" at Upper Buffalo and Caney Creek of only 0.19 dv and 0.21 dv, respectively. 80 Fed. Reg. at 18,998 Tbl.67 (JA-___). White Bluff's contribution is but a small fraction of this impact. Given that visibility in both Class I areas is improving rapidly—and already is better than the RPGs and the URPs —the extraordinary costs are unjustifiable for such imperceptible visibility improvements.

Indeed, the cost -per-deciview of improvement at Caney Creek and Upper Buffalo that would be achieved from dry FGD at White Bluff is astronomical: ranging from approximately *$2.6 billion to $3.1 billion* per deciview. EAI Comments at 12 (Add. 101) (JA-___). These values are orders of magnitude higher than the cost -per-deciview values that EPA has rejected as unjustifiable in other FIPs. *See, e.g.*, Final Montana Regional Haze FIP; 77 Fed. Reg. 57,864, 57,895 (Sept. 18, 2012) (concluding that, although DSI was cost -effective on a cost -per-ton basis, the costs were not justified by the visibility improvement at $30 million per deciview).

EPA attempts to skew the cost analysis for White Bluff by *failing to include approximately $495 million* that Petitioners will be required to incur to install dry FGD—rendering EPA's White Bluff BART determination even more defective.[8] EPA improperly excluded from its calculation legitimate costs that Petitioners would incur to install dry FGD. For example, EPA improperly excluded nearly $31 million of costs associated with "Balance of Plant" items, which are items not included in the dry FGD supplier's scope, but which are necessary to integrate the dry FGD system into the plant. *See* EAI Comments at 8-9 (Add. 97-98) (JA-___); 81 Fed. Reg. at 66,383-84 (Add. 53-54) (JA-___); EPA Response to Comments at 336 (JA-___).[9] EPA also failed to account for $85 million by escalating outdated cost information to 2013 dollars instead of relying on more accurate and recent cost information from the dry FGD supplier. *See* EAI Comments at 8 (Add. 97) (JA-___); *id.* Ex. A at 12 (JA-___); 81 Fed. Reg. at 66,382-83 (Add. 52-53) (JA-___). In addition, EPA excluded $83 million of "owner's costs" that are unavoidable and necessary, which include tasks like site investigation to inform the project design, obtaining environmental permits, and mobilizing for construction. EAI Comments at 9 (Add. 98) (JA-___). Such costs

[8] These same cost errors infect the Independence Reasonable Progress analysis.

[9] EPA refused to consider these costs because EAI did not submit to the Agency highly confidential and propriety vendor quotes to support the detailed, line-item cost estimate that EAI already had provided. EPA Response to Comments at 336 (JA-___). Despite the fact that EPA never requested the vendor quotes, they were subsequently provided (in redacted form) to EPA. *See* Entergy Petition for Reconsideration at 7-8 (JA-___).

are expressly allowed under EPA's own Coal Quality Environm ental Cost model and should have been included in cost estimates for White Bluff. EPA, *Coal Utility Environmental Cost (CUECost) Workbook Development Documentation Version 5.0* (Sept. 2009). EPA also failed to include $30 to 60 million for Allowance for F unds Used During Construction ("AFUDC"). EAI Comments at 10-11 (Add. 99-100) (JA___); *id.* Ex. A at 12 (JA -___); 81 Fed. Reg. at 66,383 -84 (Add. 53 -54) (JA -___); EPA Response to Comments at 259 (JA-___).

Although EPA ultimately adjusted its calculated co sts of dry FGD upward by a nominal amount in the Final FIP, EPA Response to Comments at 355 (JA -___), this correction still underestimates the true cost of dry FGD by hundreds of millions of dollars. *See* EAI Comments at 8 -11 (Add. 97 -100) (JA -___); Enterg y Petition for Reconsideration at 7 -8 (JA -___); *id.*, Sargent & Lundy Report at 2 (Add. 102) (JA -___). When compared with the minimal visibility improvement that would result from the installation of dry FGD, it is clear that these controls cannot constitu te SO_2 BART.

III. THE REASONABLE PROGRESS CONTROLS FOR INDEPENDENCE ARE UNLAWFUL AND UNNECESSARY.

EPA exceeded its authority under the CAA when imposing controls on Independence. EPA may impose control requirements only "as may be necessary" to make Reasonable Progress toward meeting the 2064 visibility goal. In Arkansas, the two Class I areas already meet the RPGs set by EPA and are more than two deciviews

below the URPs. Entergy Petition for Reconsideration at 4 (Add. 104) (JA -___). Spending $1 billion for visibility benefits so small they cannot be perceived certainly cannot be deemed "necessary" to meet the first implementation period's objectives. Indeed, the controls assuredly cannot be necessary for the current period because the controls cannot be installed until the next planning period. In addition, EPA's Reasonable Progress analysis unjustifiably deviated from the process used by EPA for other states, rendering it arbitrary, capricious, and unlawful.

A. The Emissions Limits Imposed on Independence Are Unnecessary and Cannot Be Justified in Light of Their Costs.

Independence is not subject to BART, which means that controls can only be justified if they are "necessary to make reasonable progress toward meeting the national goal." 42 U.S.C. § 7491(b)(2). All available data, including EPA's, belie the necessity of controls on Independence. In light of the astronomical costs associated with the controls, the already improved visibility in both Class I areas in Arkansas, and the extremely small vis ibility benefits, EPA's Reasonable Progress requirements for Independence are manifestly unreasonable and must be vacated.

Independence's contribution to visibility impairment at Upper Buffalo and Caney Creek is miniscule. The 2002 CENRAP modeling proves this point. The modeling demonstrates that sulfate formed as a result of SO_2 emissions from *all* Arkansas point sources is responsible for only 3.58% of the total visibility impairment at Caney Creek and 3.20% at Upper Buffalo. 80 Fed. Reg. at 18,990 (JA -___).

According to CENRAP, nitrates resulting from all Arkansas NOx point sources contribute even less to visibility impairment at Arkansas' Class I areas: only 0.29% of the total impairment at Caney Creek and 0.25% at Upper Buffalo. *Id.* Independence's share of this minimal contribution is but a fraction of these total contributions. EPA justified the need for NOx controls on Independence based on a false characterization of the plant's contribution to visibility impairment. EPA claimed that, "Entergy's [Quality Modeling with extensions] modeling shows that nitrate from Independence is responsible for 30 –40% of the visibility impairment in Arkansas' Class I areas on 2 of the 20% worst days." 81 Fed. Reg. at 66,359 (Add. 29) (JA-___).

EPA's statement is patently incorrect. In fact, nitrates are a minute portion of visibility impairment at Arkansas' two Class I areas and Independence's average total nitrate contribution to visibility impairment on the 20% worst days is only 0.02% at Upper Buffalo and 0.03% at Caney Creek. *See* Entergy Scenario 01 Contribution 2015-1124_FINAL, Docket No. EPA-R06-OAR-2015-0189-0220 (Sept. 13, 2016) (JA-___). Thus, the actual contribution is over three orders of magnitude *less* than EPA claimed.

The installation of EPA's selected controls will yield *no discernible visibility improvements*. EPA's modeling demonstrated that the cumulative benefit (in 2018) of installing *all* the controls in the Proposed FIP (*i.e.*, BART controls at all BART sources plus controls at Independence) will be only 0.21 dv at Caney Creek and 0.19

dv at Upper Buffalo. 80 Fed. Reg. at 18,998 Tbl.67 (JA -___). Controlling emissions from Independence would contribute only a fraction to these minute changes of less than one-fifth of a deciview.[10]

Finally, when EPA finalized the FIP, Arkansas already had achieved visibility improvements in its Class I areas that surpassed EPA's final RPGs for the first planning period, and are significantly below the URPs, rendering the imposition of controls on Independence unnecessary. Analysis by ADEQ, cited in EAI's comments, demonstrated that visibility in Caney Creek and Upper Buffalo very likely would meet the levels EPA ultimately finalized as the RPGs for 2018, *even without any additional controls on Independence.* *See* EAI Comments at 19-22 (JA-___) (citing Arkansas Department of Environmental Quality, *State Implementation Plan Review for the Five -Year Regional Haze Progress Report*, at 55-56 (May 2015)).[11]

These predictions are confirmed by more recent data that became available after the close of the comment period. These data confirm that, as of 2015, visibility

---

[10] Independence's emissions represent approximately 36% of the total SO_2 point source emissions and 21% of the NOx point source emissions in Arkansas. *See* 80 Fed. Reg. at 18,991 (JA-___).

[11] ADEQ's analysis showed that visibility was on track to meet the State's proposed RPGs of 22.48 dv for Caney Creek and 22.52 dv for Upper Buffalo. *See* EAI Comments at 19 -20 (JA-___). EPA's final RPGs of 22.47 dv for Caney Creek and 22.51 dv for Upper Buffalo both are only 0.01 dv lower than the levels proposed by Arkansas. 81 Fed. Reg. at 66,410 Tbl.21 (Add. 80) (JA -___). Accordingly, it was reasonable to conclude that visibility likely would meet the final RPGs, even without additional controls on Independence. Indeed, subsequent air monitoring data proved this to be true. *See supra.*

measurements in both Caney Creek and Upper Buffalo were better than both the final RPGs for 2018 and the more stringent RPGs in the Proposed FIP. Entergy Petition for Reconsideration at 4 (Add. 104) (JA -___); Trinity Consultants, *Regional Haze Modeling Assessment Report, Entergy Arkansas, Inc. - Independence Plant* (August 4, 2015) (Ex. A to Enterg y's Petition for Reconsideration) (Add. 105) (JA -___). EPA itself recognized in the Proposed FIP that Arkansas' Class I areas were projected to meet the URPs for the first implementation period, even without controls on Independence, 80 Fed. Reg. at 18,99 2 (JA -___), effectively conceding that the controls are not " *necessary*" in the first implementation period to ensure Reasonable Progress towards the natural visibility goal. *See* 42 U.S.C. § 7491(b)(2).

EPA should have determined that no Reasonable Progre ss controls were appropriate since the explicit statutory mandate is to set emission limits and compliance schedules *"as may be necessary"* to remedy and prevent visibility impairment. 42 U.S.C. § 7491(b)(2) (emphasis added). EPA guidance states that, aft er considering other regulatory requirements to reduce emissions and establishment of BART controls, additional emissions reductions to achieve Reasonable Progress may be unnecessary during the first implementation period. Reasonable Progress Guidance at 4-3 (JA-___).

For the foregoing reasons, controls on Independence are not *"necessary"* to satisfy the CAA's Reasonable Progress requirements, and mandating the installation of almost $1 billion in controls is unreasonable and unlawful. In light of the

indiscernible visibility benefits of the required controls, and the fact that both of Arkansas' Class I areas have surpassed EPA's own metrics for the first planning period, the emissions limits for Independence are arbitrary and capricious, and cannot be justified. *Cf. Michigan* at 2707 (finding it irrational "to impose billions of dollars in economic costs" in a CAA rule to produce minimal benefits).

B. The SO_2 Limits Are Unlawful Because They Cannot Be Implemented During the First Implementation Period.

In addition to being unnecessary, the final emission limitations are unlawful because they require controls that cannot be installed during the current implementation period. EPA's regulations require SIPs to consider "the emission reduction measures needed to achieve [RPGs] *for the period covered by the implementation plan*." 40 C.F.R. § 51.308(d)(1)(i)(B) (emphasis added). Here, the first period ends in 2018, *see, e.g.*, 81 Fed. Reg. 66,338 (Add. 8) (JA -___), but SO_2 controls at Independence cannot be fully implemented until 2021, three years *after* the current period ends. *Id.* at 66,416-20 (Add. 86-90) (JA -___). Accordingly, the emissions reductions EPA expects would not be achieved until well into the second implementation period. This is precisely the situation the Fifth Circuit confronted last year when it granted a stay of a similar regional haze FIP in Texas. *Texas v. EPA*, 829 F.3d 405, 429 (5th Cir. 2016) ("EPA's federal implementation plan requires power plants in Texas to meet Reasonable Progress goals by installing scrubbers in 2019 and

2021. Petitioners persuasively argue that this exceeds the power granted by the Regional Haze Rule.").

As in Texas, EPA failed to explain why it is appropriate to require Reasonable Progress controls in a FIP for t he first implementation period when the controls cannot be installed or produce visibility benefits in that implementation period. Further, the Regional Haze Rule grants EPA multiple bites at this apple. There are still four more planning periods over th e 64-year program during which the necessity of Reasonable Progress controls can be evaluated and Arkansas has not been given an opportunity to even consider appropriate measure for the second implementation period.[12] Controls on Independence should not be imposed for an implementation period that will have ended well before any emissions reductions can be achieved. This is consistent with EPA's Reasonable Progress Guidance: "It is reasonable for [a state] to defer reductions to later planning periods in o rder to maintain a consistent glidepath toward the long-term goal." Reasonable Progress Guidance at 1-4 (JA-___). That is precisely the situation here as visibility in Arkansas' two Class I areas already is better than the glidepath.

C. EPA's Reasonable Progress Analysis Arbitrarily and Capriciously Departed from the Approach Used in Other Regional Haze FIPs.

The final Reasonable Progress emissions limits for Independence must be vacated, as they are the product of an arbitrary methodology that unlawfully fails to

[12] Arkansas is due to submit its next SIP in 2021 to address the period of 2018 -2028. 40 C.F.R. § 51.308(f).

conform with EPA's well -established precedent for evaluating Reasonable Progress. EPA's novel approach violates the Agency's obligation to adequately explain why its new approach is justified, and runs afoul of the CAA's "national uniformity mandate."

1. EPA's Reasonable Progress Analysis for Arkansas Is Arbitrary and Capricious.

EPA's Reasonable Progress analysis for Independence is wholly unique, and completely unlike the numerous Reasonable Progress analyses EPA has undertaken in other FIPs. An agency cannot simply reverse course for no reason. The Supreme Court has made clear that an agency must "show that there are good reasons for [a] new policy." *F.C.C. v. Fox Television Stations, Inc.* , 129 S. Ct. 1800, 1811 (2009). Likewise, this Court ha s explained that "a sudden and unexpected change in agency policy" may be characterized as arbitrary and capricious. *Friends of Boundary Waters Wilderness v. Dombeck*, 164 F.3d 1115, 1123 (8th Cir. 1999). *See also Gaitan v. Holder*, 671 F.3d 678, 685 (8th Cir. 2012) (Bye, J. concurring).

In prior FIPs, EPA followed a consistent multi-step evaluation that included: (1) a "Q/D analysis" (*i.e.*, total emissions divided by distance to the Class I area) for each point source and relevant Class I area to identi fy those point sources requiring further evaluation; (2) a photochemical modeling scenario utilizing source apportionment to quantify visibility impacts from the sources identified in the Q/D analysis; and (3) an extinction percentage threshold to arrive at what EPA claimed was a common breakpoint in potential visibility improvement. EAI Comments at 15 -16

(JA-___) (citing *Technical Support Document for the Oklahoma and Texas Regional Haze Federal Implementation Plans (FIP TSD)* , Docket No. EPA -R06-OAR-2014-0754-0007, App. A at A -4; A -15–A-26; A -49 (Nov. 2014)). This structure allowed EPA to determine for which sources the installation of controls would potentially be worthwhile. *See* Proposed Texas Regional Haze FIP, 79 Fed. Reg. 74,818, 74,839 (Dec. 16, 2014). *See also*, Proposed Arizona Regional Haze FIP, 79 Fed. Reg. at 9,352-53; Proposed Montana Regional Haze FIP, 77 Fed. Reg. at 24,058 -59; and Proposed North Dakota Regional Haze FIP, 76 Fed. Reg. at 58,624-26. After narrowing the list of potential poin t sources in those other states, EPA then completed the required four-factor Reasonable Progress analysis. *See* Proposed Texas Regional Haze FIP, 79 Fed. Reg. at 74,872; Proposed Arizona Regional Haze FIP, 79 Fed. Reg. at 9,352 -53; Proposed Montana Regiona l Haze FIP, 77 Fed. Reg. at 24,058 -59; Proposed North Dakota Regional Haze FIP, 76 Fed. Reg. at 58,624-26.

Inexplicably, EPA's Region 6 office, the same office that drafted the Texas FIP, abandoned these established procedures when developing the Final F IP here. EPA did not perform a Q/D analysis, did not perform source apportionment modeling to quantify impacts from individual sources, and did not determine the threshold above which a potential visibility improvement could be achieved. Simply put, EPA did no evaluation to identify the Arkansas point sources that contribute to visibility impairment (or the scope of those contributions) at Caney Creek or Upper Buffalo. Instead, EPA pre-judged the matter and subjected only Independence to the

four-factor Reasonable Progress analysis, in which an evaluation of potential visibility impacts is completely absent. EPA's sole explanation is that Independence is a large source of emissions and EPA deemed it "unreasonable to ignore" the facility. 80 Fed. Reg. at 18,992 (JA-___). EPA provided no reasoned explanation for its new approach for analyzing Reasonable Progress in the Final FIP, rendering it arbitrary and capricious. *See F.C.C. v. Fox*, 129 S. Ct. at 1811.

EPA acknowledged that its approach in Arkansas diverges from the one it took in other states, EPA Response to Comments at 109 (JA -___). Yet EPA provided no rational justification for abandoning the approach used consistently in other states and firmly established in guidance as the proper methodology . *See* Reasonable Progress Guidance at 3-2 (JA-___) (directing the Agency to "consider a broad array of sources and activities when deciding which sources or source categories contribute significantly to visibility impairment.").

This stark departure *requires* a satisfactory explanation. *See Dillmon v. NTSB*, 588 F.3d at 1089 -90. EPA merely explained that it felt it sufficient to target the three largest point sources of SO_2 and NOx emissions in Arkansas for a potential Reasonable Progress analysis (White Bluff, Independence, and AEP's Flint Creek plant). *See* EPA Response to Comments at 108 -09 (JA-___). Because White Bluff and Flint Creek are subject to BART, EPA concluded that no additional controls were necessary at those sources, so the Reasonable Pro gress analysis fell solely on Independence. *Id.*

This explanation is wholly inadequate because it fails to address whether those three largest sources are in fact contributing to visibility impairment at Caney Creek and Upper Buffalo, or whether smaller sources in the state also may contribute to visibility impairment. And it ignores the possibility that smaller sources could be larger contributors to impairment, due to factors such as proximity, quantity, type and relative location to the Class I areas. It is unreasonable to simply assume that the three largest sources of emissions (and only those sources) contribute to visibility impairment that may be remedied by the installation of Reasonable Progress controls. Because EPA failed to provide a reasoned basis for ignoring these other emission sources for Reasonable Progress purposes, its novel approach is arbitrary and capricious.

2. EPA's Reasonable Progress Analysis for Arkansas Violates the CAA's National Uniformity Mandate.

The CAA's national uniformity mandate requires EPA to "assure fairness and uniformity in the criteria, procedures, and policies applied by the various regions in implementing and enforcing [the CAA]." 42 U.S.C. § 7601(a)(2). This language is unambiguous. EPA must uniformly implement and enforce the CAA across the country. EPA has adopted this requirement into its own regulations, which instruct the Agency to strive for "standardiz[ed] criteria, procedures and policies" when "implementing and enforcing the act." 40 C.F.R. §§ 56.3(a) and (b). The regulations further oblige EPA to ensure that actions taken under the CAA: (1) "[a]re carried out

fairly and in a manner that is consistent with the Act and Agency policy as set forth in the Agency rules and program directives" and (2) "[a]re as consistent as reasonably possible with activities of other Regional Offices." 40 C.F.R. § 56.5(a). *See Nat'l Envtl. Dev. Assoc.'s Clean Air Project v. EPA*, 752 F.3d 999, 1009–11 (D.C. Cir. 2014) (vacating, based on regional consistency regulations, EPA memorandum directing certain regional offices to use a different methodology in a certain type of permitting analysis).

EPA's Reasonable Progress analysis in the Final FIP disregarded this statutory and regulatory obligation to implement the CAA consistently and fairly across the country. As explained above, EPA's analysis in Arkansas was entirely different from its approach used in numerous other states. The Reasonable Progress control determination for Independence must be vacated for failure to comply with the CAA's national uniformity mandate.

IV. THE COMPLIANCE DEADLINE FOR NOX CONTROLS AT WHITE BLUFF AND INDEPENDENCE IS NOT A LOGICAL OUTGROWTH OF THE PROPOSAL AND IS ARBITRARY AND CAPRICIOUS.

The Final FIP imposes NOx emissions limits on White Bluff and Independence that must be met in an unduly short time—only 18 months from the date of the Final FIP. The compliance deadline is not a logical outgrowth of the Proposed FIP and must be vacated.

A. The 18-Month Compliance Deadline Is Not a Logical Outgrowth of the Proposed FIP.

In the Final FIP, EPA shortened the compliance deadline for the NOx emission limits for White Bluff and Independence from a proposed three -year period to 18 months, unexpectedly and unlawfully *halving* the time allotted for co ming into compliance. 81 Fed. Reg. at 66,338, 66,354, 66,416, 66,420 (Add. 8, 24, 86, 90) (JA-___, JA -___, JA -___, JA -___). This extreme alteration of the compliance deadline violates the notice -and-comment requirements of the CAA and the APA, which permit EPA's "proposed rule and its final rule ... [to] differ only insofar as the latter is a 'logical outgrowth' of the former." *Envtl. Integrity Project v. EPA* , 425 F.3d 992, 996 (D.C. Cir. 2005). An agency's final rule may not "pull a surprise switcheroo on regulated entities," *id.* at 996, and thus is only a logical outgrowth of its proposal "if interested parties should have anticipated that the change was possible, and thus reasonably should have filed their comments on the subject during the notice -and-comment period." *CSX Transp., Inc. v. Surface Transp. Bd.,* 584 F.3d 1076, 1079 –80 (D.C. Cir. 2009) (citation omitted). Courts have made clear that interested parties are not required to "divine [the agency's] unspoken thoughts ," *id.* at 1080, and, without proper notice, are deprive d of the opportunity "to offer comments that could persuade the agency to modify its rule." *Nat'l Exch. Carrier Ass'n, Inc. v. FCC,* 253 F.3d 1, 4 (D.C. Cir. 2001) (citation omitted).

EPA did not solicit comments on the proposed three -year NOx deadline for White Bluff and Independence or even suggest it was considering a shorter compliance timeframe. This stands in stark contrast to EPA's express solicitation of comments regarding the compliance deadlines for other sources. *See, e.g.*, 80 Fed. Reg. at 18,985 (JA -___) (proposing three -year compliance deadline, but soliciting comments on one to five years); *id.* at 18,988 (JA -___) (proposing three -year compliance deadline of three years, but soliciting comments "on the appropriateness" of this date). EPA's specific requests for feedback on the appropriate length of certain deadlines indicated that the Agency was not considering alternatives to the other proposed deadlines for which it did not solicit comment. Accordingly, Petitioners had no reason to anticipate that a change to the deadlines for White Bluff or Independence was under consideration. *See CSX Transp., Inc.*, 584 F.3d at 1079.

Indeed, EPA itself suggested in the Final FIP that it had *not* been considering changing the proposed three -year deadline. In finalizing the shorter deadline, EPA stated that it made the change in response to comments it received from environmental groups. *See* 81 Fed. Reg. at 66,378 (Add. 48) (JA-___). EPA explained that the comments urged the Agency to shorten the compliance deadline "because the typical installation timeframe for low NOx burners is 6–8 months from bid evaluation through startup of the technology" and because Entergy "may have already started the process of installing LNB/SOFA controls in anticipation of the BART requirement." *Id.* at 66,342 (Add. 12) (JA-___). EPA's receipt of comments on the White Bluff and

Independence compliance deadline does not satisfy the Agency's obligation under the CAA and APA to provide proper notice; it is well -established tha t EPA "cannot bootstrap notice from a comment."[13] *Small Refiner Lead Phase-Down Task Force v. EPA*, 705 F.2d 506, 549 (D.C. Cir. 1983); *Am. Fed'n of Labor v. Donovan*, 757 F.2d 330, 340 (D.C. Cir. 1985).

B. EPA's Decision to Shorten the Compliance Deadline to 18 Months Is Arbitrary and Capricious.

The unexpected curtailment of the compliance deadline is not harmless error. EPA provided no reasoned basis for its truncation of the compliance schedule, rendering the 18 -month deadline arbitrary and capricious. Contrary to EPA's unsupported assumptions, LNB/SOFA cannot be installed and properly commissioned at White Bluff and Independence within 18 months, in light of the extensive work that must go into planning, permitting, designing, engineering, procuring, installing, tuning, and testing such massive equipment on four units.[14] The environmental commenters' request for a shorter deadline was based on an expert

[13] The unexpected curtailment of the compliance deadline is not harmless error. EAI cannot ensure the LNB/SOFA equipment is inst alled and operating in a manner that will secure reliable and consistent compliance with the NOx limits at all four units by the 18-month deadline, even though EAI has truncated its internal procedures for the project and work already is underway. *See* Entergy Petition for Reconsideration at 10-12 (JA-___).

[14] EAI has obtained a permit for the installation of LNB/SOFA at White Bluff Units 1 and 2, and has the equipment onsite at Unit 1, but a massive amount of work still remains before LNB/SOFA can be permit ted, installed, and commissioned at all four units.

report, which, in turn, relied on a 10 -year-old vendor association report. Comments of Earthjustice, National Parks Conservation Association, and Sierra Club, Docket No. EPA -R06-OAR-2015-0189-0153, at 25 (Aug. 7, 2015) (JA -___); Victoria R. Stamper, Technical Support Document to Comments of Conservation Organizations, Docket No. EPA-R06-OAR-2015-0189-0171, at 46 (Aug. 5, 2015) (JA-___).

The vendor association report did not account for any site -specific factors, such as permitting considerations, a company's internal project development and approval process, site characteristics, or reliability concerns associated with outages necessary for the installation of LNB/SOFA at multiple units. To the contrary, the vendor association report explicitly acknowledged that deployment time may vary depending on the specific conditions of a given site. Entergy Petit ion for Reconsideration at 10 (JA -___) (citing Institute of Clean Air Companies, Typical Installation Timelines for NOx Emission Control Technologies on Industrial Sources, at 4 (Dec. 4, 2006)).

The outdated, generic information about timing included in the environmental group comments does not provide a reasonable basis for shortening the deadline for these *specific* units. EPA did not even attempt to explain how the shortened deadline is reasonable for White Bluff and Independence in light of site -specific and company -specific considerations, and Entergy was given no opportunity to provide such information to EPA.

EPA's about-face is even more arbitrary in light of the fact that the Agency typically provides five years for the installation of LNB/SOFA in regional haze FIPs. *See, e.g.*, Final Montana Regional Haze FIP, 77 Fed. Reg. at 57,875 (allowing five years where installation of additional controls was necessary); Final Wyoming Regional Haze FIP, 79 Fed. Reg. 5,032, 5,038-39 (Jan. 30, 2014) (same); Final North Dakota Regional Haze FIP, 77 Fed. Reg. 20,894, 20,907 (Apr. 6, 2012) (same).

In this case, Entergy has only acquired control equipment for one unit at White Bluff, and still must procure equipment for the second White Bluff unit and both Independence units (and install the equipment on all four units) to comply with the requirements in the Final FIP. Entergy Petition for Reconsideration at 11 n.46 (JA-___). It is arbitrary and capricious to require the same deadline in both circumstances when the amount of progress varies so greatly. Had EPA solicited comments on the shorter deadline for the NOx controls, Entergy would have explained the process required to install LNB/SOFA at four generating units and would have demonstrated that an 18-month deadline is infeasible. *See* Entergy Petition for Reconsideration at 13 (JA-___).

V. THE LOW-LOAD NOX EMISSIONS LIMIT APPLICABLE TO WHITE BLUFF AND INDEPENDENCE IS NOT A LOGICAL OUTGROWTH OF THE PROPOSED FIP AND IS UNACHIEVABLE.

The final emissions limit that applies to White Bluff and Independence during periods of low-load operation is not a logical outgrowth of the proposed NOx limits.

See Envtl. Integrity Project, 425 F.3d at 996. Petitioners did not have an opportunity to comment on EPA's novel approach to the emissions limit for low-load periods, which is unachievable. Therefore, the final low-load NOx emission limit applicable to White Bluff and Independence must be vacated.

The Proposed FIP included a single NOx emissions limit for all periods of operation, to be met by each White Bluff and Independence unit on a rolling 30-boiler operating day average basis. 80 Fed. Reg. at 18,974-75 (JA -___). EAI submitted comments explaining that EPA's proposed limits could not be met during low-load operations and offered an alternative low-load limit. *See* EAI Comments at 51 (JA-___) (proposing a 30-boiler operating day rolling average limit of 1,342.5 lb/hr for all periods of unit operation). In the Final FIP, EPA attempted to address low load operation by adopting a separate limit but its limit differs substantially from Entergy's proposed solution. 81 Fed. Reg. at 66,416-17 (Add. 86-87) (JA -___) (requiring the units to meet a three-hour rolling average limit of 671 lb/hr at loads of less than 50 percent of maximum heat input rating).

Petitioners had no opportunity to comment on the achievability of the level of the limit or the averaging period for compliance with the limit. Entergy Petition for Reconsideration at 13-14 (JA -___). Because Petitioners were deprived of the opportunity "to offer comments that could persuade the agency to modify" the NOx emissions limit, the low-load NOx limit should be vacated and remanded to EPA. *See Nat'l Exch. Carrier Ass'n, Inc.*, 253 F.3d at 4.

Had Petitioners been given the opportunity to comment, they would have explained to EPA that the low-load NOx emissions limits are not achievable. *See* Entergy Petition for Reconsideration at 13-14 (JA-___). This violates the requirement that, after conducting a BART or Reasonable Progress analysis, EPA adopt emissions limitations that can be *achieved* using the selected emission controls. 40 C.F.R. § 51.301 (BART is "an emission limitation based on the degree of reduction *achievable* through the application of the best system of continuous emission reduction for each pollutant which is emitted by an existing stationary facility.") (emphasis added).

Here, EPA's adoption of a three-hour averaging period and an unreasonably low emission limit renders the limit unachievable during fluctuating load conditions. *See* Entergy Petition for Reconsideration at 13-14 (JA-___). White Bluff and Independence often operate as load-following, which requires the units to ramp up and down quickly, thereby potentially spiking NOx emissions to levels well above typical for short periods of time. EAI Comments at 51 (JA-___); Entergy Petition for Reconsideration at 13 (JA-___). While NOx emissions quickly stabilize, these brief spikes can cause an exceedance of EPA's low-load NOx limit when averaged over a short three-hour period.

EPA's introduction of the three-hour averaging period in the Final FIP means that a single short spike in NOx emissions could result in an exceedance of the low-load NOx emission limit for that period even if the required emission controls are operating properly. Entergy Petition for Reconsideration at 13-14 (JA-___).

Accordingly, the Court must vacate and remand this provision to EPA so it can establish achievable NOx limits at White Bluff and Ind ependence during periods of low-load operation.

VI. THE FINAL FIP ARBITRARILY AND CAPRICIOUSLY IMPOSES NOX BART CONTROL REQUIREMENTS ON UNITS SUBJECT TO CSAPR

The Final FIP requires installation of source -specific NOx BART controls at EGUs that already are subject to the ozone -season NOx trading program under CSAPR. 40 C.F.R. § 52.38(b). The Regional Haze Rule explicitly provides that a "[s]tate . . . subject to a [Transport Rule] trading program [*i.e.*, CSAPR] . . . need not require BART-eligible [electric generating units]. . . to install, operate, and maintain BART" for the pollutant covered by such trading program. 40 C.F.R. § 51.308(e)(4). EPA's decision to impose costly BART control requirements on Arkansas sources, despite the Agency's determination that a state's participation in CSAPR satisfies BART obligations, is arbitrary and capricious. Accordingly, the Final FIP's NOx BART determinations for these sources should be vacated.

EPA has determined that participation in CSAPR provides greater Rea sonable Progress towards the national visibility goal than BART with respect to emissions from EGUs in the CSAPR states. 77 Fed. Reg. 33,642, 33,643 (June 7, 2012) ("[T]he trading programs in the Transport Rule, also known as the Cross -State Air Pollution Rule (CSAPR), achieve greater reasonable progress towards the national goal of achieving natural visibility conditions in Class I areas than source -specific Best

Available Retrofit Technology (BART) in those states covered by the Transport Rule."). Arkansas is subject to CSAPR's ozone season NOx trading program 76 Fed. Reg. 48,208, 48,212 -13 (Aug. 8, 2011). However, despite the regulatory provisions allowing EGUs subject to a CSAPR trading program to rely on that program in lieu of BART, the Final FIP di sregards Arkansas' participation in CSAPR and imposes source-specific NOx BART requirements for BART-eligible EGUs.

EPA's failure to determine that CSAPR satisfies BART in Arkansas is arbitrary and capricious. EPA has historically allowed states to rely on participation in a trading program to satisfy BART requirements. *See, e.g.*, 81 Fed. Reg. 78,954, 78,958 (Nov. 10, 2016) (finding that recent changes to CSAPR do not adversely impact EPA's finding that CSAPR is better than BART for those states that co ntinue to participate in CSAPR). EPA's explanation for its inconsistent approach in Arkansas fails to show good reason for its change in policy. *See F.C.C. v. Fox*, 129 S. Ct. at 1811; *Friends of Boundary Waters Wilderness*, 164 F.3d at 1123.

EPA explain ed that it declined to consider CSAPR participation to satisfy BART because: (1) the choice to rely on CSAPR is discretionary; (2) in its 2008 BART SIP, ADEQ did not elect to rely on the predecessor transport rule that was vacated and subsequently replace d by CSAPR; and (3) the Agency was in the process of reconsidering state CSAPR emissions budgets at the time it was drafting Arkansas' FIP. EPA Response to Comments at 253 (JA -___). These explanations are not satisfactory. *See Niobrara River Ranch*, 373 F.3d at 884. First, regardless of whether

EPA has discretion to rely on CSAPR in lieu of BART, simply so stating does not establish that this discretion was exercised reasonably, particularly where EPA has established that participation in CSAPR will prov ide *greater* visibility improvement than source-specific BART. Second, whether ADEQ elected to rely on an entirely different trading program is irrelevant to EPA's independent determination that it would not rely on CSAPR. Third, the CSAPR ozone -season NOx emissions budget for Arkansas was not subject to EPA's reconsideration, and remained in effect through the duration of the rulemaking procedure. *See EME Homer City Generation, L.P. v. EPA,* 795 F.3d 118, 132 (D.C. Cir. 2015).[15] For these reasons, the requirement that Arkansas' EGUs must install BART NOx emission controls in addition to participation in the CSAPR trading program should be vacated.

CONCLUSION

Due to the numerous fatal flaws in the Final FIP, Petitioners respectfully request that the Cou rt vacate the SO_2 and NOx requirements imposed upon White Bluff and Independence, and the source -specific NOx requirements for the BART EGUs in Arkansas that are subject to CSAPR.

[15] *See also* Proposed Texas BART FIP, 82 Fed. Reg. 912, 946 (Jan. 4, 2017) (proposing to rely on CSAPR to address NOx BART requirements for Texas EGUs, even though Texas budget was subject to reconsideratio n in *EME Homer City Generation, L.P. v. EPA*).

DATED: February 17, 2017

Respectfully submitted,

By: */s/ Debra J. Jezouit*

William M. Bumpers
Debra J. Jezouit
Allison Watkins Mallick
Baker Botts L.L.P.
1299 Pennsylvania Ave., NW
Washington, DC 20004
Telephone: (202) 639-7700
william.bumpers@bakerbotts.com
debra.jezouit@bakerbotts.com
allison.mallick@bakerbotts.com

/s/ Timothy K. Webster

Timothy K. Webster
Joel F. Visser
Sidley Austin L.L.P.
1501 K Street, N.W.
Washington, D.C. 20005
Telephone: (202) 736-8000
twebster@sidley.com
jvisser@sidley.com

Kelly McQueen
Entergy Services, Inc.
425 W. Capitol Ave., 27th Floor
Little Rock, AR 72201
(501) 377-5760
kmcquel@entergy.com

Counsel for Entergy Arkansas Inc., Entergy Mississippi Inc., and Entergy Power, LLC

/s/ Jennifer L. Loiacano
Jennifer L. Loiacano
Arkansas Electric Cooperative Corporation
1 Cooperative Way
Little Rock, Arkansas 72209
501.570.2187
Jennifer.Loiacano@aecc.com

Counsel for Arkansas Electric Cooperative Corporation

/s/ Chad L. Wood
Chad L. Wood
PPGMR LAW, PLLC
101 Morgan Keegan Dr., Suite A
Little Rock, Arkansas 72202
(501) 603-9000
Chad@ppgmrlaw.com

Counsel for Energy and Environmental Alliance of Arkansas

CERTIFICATE OF COMPLIANCE

The undersigned counsel states that this motion complies with FED. R. APP. P. 32(a)(7) because it contains 12,509 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(f), as counted by a word processing system and, therefore, is within the 13,000 word limit. This motion also complies with typeface and type -style requirements of FED. R. APP. P. 27(a)(5) because it has been prepared in a proportionally spaced typeface in 14-point Garamond font.

Pursuant to Circuit Rule 28A(h), I also hereby certify that electronic files of this Brief and accompanying Addendum have been submitted to the Clerk via the Court's CM/ECF system and the files have been scanned for viruses and are virus free.

Dated: February 17, 2017

/s/ Debra J. Jezouit

Counsel for Entergy Arkansas Inc., Entergy Mississippi Inc., and Entergy Power, LLC

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing brief were served, this 17th day of February, 2017, through CM/ECF on all registered counsel.

/s/ Debra J. Jezouit